

**REMARKS**

The Applicants do not believe that examination of the foregoing response will result in the introduction of new matter into the present application for invention. Therefore, the Applicants, respectfully, request that the above amendment be entered in and that the claims to the present application, kindly, be reconsidered.

The Final Office Action dated November 11, 2004 has been received and considered by the Applicants. Claims 1-19 are pending in the present application for invention. The Applicants respectfully point out that there are actually 20 claims pending. There are two claims that are numbered Claim 5. The foregoing amendment has corrected this oversight by renumbering the second Claim 5 as Claim 6 and renumbering the remaining claims accordingly. Claims 1-19 (which are actually Claims 1-20) stand rejected by the Final Office Action dated November 11, 2004.

The Office Action rejects Claims 1-4, the second Claim 5 and Claims 10-14 under the provisions of 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,735,242B1 issued in the name of Kenny et al. (hereinafter referred to as Kenny et al.) in view of U.S. Patent No. 6,061,386 issued in the name of Molev-Shtelman (hereinafter referred to as Molev-Shtelman).

Regarding Claim 1, the Examiner states that Kenny et al. teach a transmission system comprising at least a station of a first type and a station of a second type which include a transmitting part having a transmit timing controller for transmitting data at a transmitting timing and a receiving part having a synchronizing circuits for synchronization with data transmitted from another station to provide a receive timing characterized in that the transmit timing is fixed in response to receive timing.

The Applicants respectfully point out that the Final Office Action makes contradictory statements regarding the teaching of Kenny et al. The Examiner first states that Kenny et al. teach that the station of the second type has a synchronization circuit that provide chip fractions shifted in time at col. 3, lines. It appears that the Examiner's position here is that the timing being fixed by Sync message as taught by Kenny et al. is equivalent to the subject matter for the station of the second type has a synchronization circuit that provide chip fractions shifted in time recited by the rejected claims. The Applicants respectfully point out that while Kenny et al. discuss acquisition and tracking (coarse and fine alignments of the received signal),

there is no disclosure, or suggestion, for the station of the second type to provide chip fractions shifted in time recited by rejected Claim 1.

The Examiner then takes the position that Kenny et al. do not teach a that the station of the second type has a synchronization circuit that provide chip fractions shifted in time. The Applicants concur with this position.

The Examiner further states that Molev-Shtelman teach fine synchronization that provide chip fractions shifted in time at col. 6, lines 1-19. The Applicants, respectfully, disagree. While, Molev-Shtelman may teach fine synchronization at col. 6, lines 1-19, however, there is no disclosure, or suggestion, for the station of the second type has a synchronization circuit that provide chip fractions shifted in time. The Applicants, respectfully draw the Examiner's to col. 7, lines 34-56 of Molev-Shtelman wherein the receiver (station of the second type) is discussed. The synchronizer 86 is detailed to have functions to synchronize the carrier wave for the demodulator, synchronize the timing of the analog to digital conversion in the demodulator and to synchronize the digital system. There is no mention, discussion, suggestion or motivation within Molev-Shtelman that would lead a person skilled in the art to shift chip fractions in time as defined by rejected Claim 1. Therefore, this rejection is respectfully, traversed.

Claim 2, depends from and further narrows and defines Claim 1, therefore, Claim 2 is believed to be allowable over the combination of Kenny et al. with Molev-Shtelman.

Regarding Claim 3, the Examiner takes Official Notice of the adjusting frequency shift as shown in U.S. Patent No. 4,601,047. The Applicants, respectfully, point out that the subject matter recites by the rejected claims is complicated subject matter. The Applicants assert that that rejected Claim 3 defines subject matter for the stations of the second type evaluating a frequency shift relative to the transmitting frequency of the station of the first type and modifying the transmitting frequency of the station of the second type as a function of this frequency deviation. This subject matter defined by rejected Claim 3 is clearly more than just frequency shifting. The Applicants further assert that the foregoing subject matter is not notoriously well known within the art and requests that the Examiner produce a prior art reference that illustrates frequency shifting in the manner as recited by rejected Claim 3. The Applicants further point out that rejected Claim 3 includes all the limitations of Claim 1, which as previously discussed, is believed to be allowable over the combination of Kenny et al. with

Molev-Shtelman.

The Applicants still further assert that neither Kenny et al. nor Molev-Shtelman disclose or suggest the subject matter defined by rejected Claim 3. The Examiner states that the combination of Kenny et al. with Molev-Shtelman teaches a mobile second type of station and a base of the first type. The Applicants assert that that rejected Claim 3 defines subject matter for the stations of the second type evaluating a frequency shift relative to the transmitting frequency of the station of the first type and modifying the transmitting frequency of the station of the second type as a function of this frequency deviation. This subject matter is not disclosed or suggested by the combination of Kenny et al. with Molev-Shtelman.

Regarding Claim 4, the Examiner states that Kenny et al. teach a station of the first type suitable for a system comprising at least a station of the first type and a station of the second type which include a transmitting part having a transmit timing controller for transmitting data at a transmit timing and a receiving part having synchronizing circuits for synchronization with data transmitted from another station to provide a receive timing. Claim 4 recites subject matter for "the receiving part of the station of the second type has a synchronization circuit that provide chip fractions shifted in time".

The Examiner then takes the position that Kenny et al. do not teach a that the station of the second type has a synchronization circuit that provide chip fractions shifted in time. The Applicants concur with this position.

The Examiner further states that Molev-Shtelman teach fine synchronization that provide chip fractions shifted in time at col. 6, lines 1-19. The Applicants, respectfully, disagree. While, Molev-Shtelman may teach fine synchronization at col. 6, lines 1-19, however, there is no disclosure, or suggestion, for the station of the second type has a synchronization circuit that provide chip fractions shifted in time. The Applicants, respectfully draw the Examiner's to col. 7, lines 34-56 of Molev-Shtelman wherein the receiver (station of the second type) is discussed. The synchronizer 86 is detailed to have functions to synchronize the carrier wave for the demodulator, synchronize the timing of the analog to digital conversion in the demodulator and to synchronize the digital system. There is no mention, discussion, suggestion or motivation that would lead a person skilled in the art to shift chip fractions in time as defined by rejected Claim 4. Therefore, this rejection is respectfully, traversed.

Regarding Claim 5 (the second Claim 5), the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit the provides chip fractions shifted in time. The Examiner states that Claim 5 broadly recites a "satisfactory state of synchronization". The Applicants, respectfully, point out that rejected Claim 5 (the second Claim 5) recites that chip fractions are shifted in time to produces a first output corresponding to a satisfactory state of synchronism. This recitation clearly identifies that chip fractions are shifted in time; which as previously discussed is not disclosed or suggested by any of the cited references. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 10, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner states that the claim broadly recites a "satisfactory state of synchronization". The Applicants, respectfully, point out that rejected Claim 10 recites that chip fractions are shifted in time to produces a first output corresponding to a satisfactory state of synchronism. This recitation clearly identifies that chip fractions are shifted in time; which as previously discussed is not disclosed or suggested by any of the cited references. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 11, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner further states that Molev-Shtelman discloses that the synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output. The Applicants, respectfully, point out that simply disclosing a coarse and a fine synchronization is not equivalent to a synchronization circuit that chip fractions shifted in time to produce an already produced chip fraction output that contains chip fraction previously produced at the first output. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 12, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed,

Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner further states that Molev-Shtelman discloses that the synchronization circuit provides chip fractions shifted in time to produce a recently produced chip fraction output that contains chip fraction that have just been produced. The Applicants, respectfully, point out that simply disclosing a coarse and a fine synchronization is not equivalent to a synchronization circuit that provides chip fractions shifted in time to produce a recently produced chip fraction output that contains chip fraction that have just been produced. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 13, the Examiner takes Official Notice of the adjusting frequency shift as shown in U.S. Patent No. 4,601,047. The Applicants, respectfully, point out that the subject matter recited by the rejected claims is complicated subject matter. The Applicants assert that that rejected Claim 13 defines subject matter for the receiving part of the station of the second type including an analysis circuit that receives chip fractions shifted in time by the synchronization circuit and determines a frequency drift, therefrom. This Applicants respectfully point out that the subject matter defined by rejected Claim 13 includes more than just frequency shifting. The Applicants further assert that the foregoing subject matter is not notoriously well known within the art and requests that the Examiner produce a prior art reference that illustrates frequency shifting in the manner as recited by rejected Claim 13. The Applicants further point out that rejected Claim 13 includes all the limitations of Claim 12, which as previously discussed, is believed to be allowable over the combination of Kenny et al. with Molev-Shtelman. As previously discussed, the combination of Kenny et al. with Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. Therefore, this rejection is respectfully traversed.

Regarding Claim 14, the Examiner states that Kenny et al. teaches or suggest the recited subject matter for a transmission system wherein the receiving part of the station of the second type further comprises means for modifying clock frequencies in response to the frequency drift. The Examiner's position is that the wording of Claim 14 broadly encompasses frequency drift. The Applicants respectfully point out that rejected Claim 14 specifically recites "means for modifying clock frequencies in response to the frequency drift" and that the Final Office Action has not indicated where within the cited references this subject matter is disclosed or suggested. Absent such a showing, a *prima facie* of obviousness is not made. Therefore, this rejection is

respectfully traversed.

The Final Office Action rejects Claim 5 (the first Claim 5), Claims 6-9 and Claims 15-19 10-14 under the provisions of 35 U.S.C. §103(a) as being unpatentable over Kenny et al. in view of U.S. Patent No. 4,601,047 issued in the name of Horwitz et al. (hereinafter referred to as Horwitz et al.).

Regarding Claim 5, the Examiner states that Kenny et al. teach a synchronization method suitable for a system comprising at least a station of the first type and a station of the second type which includes a transmitting part having a transmit timing controller for transmitting data at a transmit timing and receiving part having synchronizing circuits for synchronization with data transmitted from another station to provide a receive timing. The Examiner states that Kenny et al. do not teach a station of the second type that has a synchronization circuit providing chip fractions shifted in time. The Examiner further states that Horwitz et al. teach fine synchronization that provide chip fractions shifted in time at col. 19, line 57-col. 22, lines 29. The Applicants, respectfully, disagree. Horwitz et al. may teach fine synchronization at col. 19, line 57-col. 22, lines 29, however, there is no disclosure, or suggestion, of chip fractions being shifted in time. Therefore, this rejection is respectfully, traversed.

Regarding Claim 6, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in times. As previously discussed, the Applicants contest this assertion made in the Final Office Action. The Applicants respectfully point out that each and every disclosure of fine synchronization is not equivalent to shifting chip fractions in time. The Examiner states that Molev-Shtelman teaches a fine sync which is accurate to a fraction of a chip at col. 6, lines 4-19. The Applicants' position is that a simple statement for a fine sync that is accurate to a fraction of a chip does not render obvious the subject matter shifting chip fractions in time.

Furthermore, the transmission system of Claim 6, defines that the synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output. The Final Office Action simply repeats the subject matter defined by Claim 6 and asserts that this subject matter is obvious. The Applicant, respectfully, asserts that this amounts to hindsight recreation. Accordingly, this rejection is traversed.

Regarding, Claim 7, the Examiner states that Molev-Shtelman teaches a synchronization

circuit that provides chip fractions shifted in times. As previously discussed, the Applicants contest this assertion made in the Final Office Action. The Applicants respectfully point out that each and every disclosure of fine synchronization is not equivalent to shifting chip fractions in time. The Examiner states that Molcv-Shtelman teaches a fine sync which is accurate to a fraction of a chip at col. 6, lines 4-19. The Applicants' position is that a simple statement for a fine sync that is accurate to a fraction of a chip does not render obvious the subject matter shifting chip fractions in time.

Furthermore, the transmission system of Claim 7, defines that the synchronization circuit provides chip fractions shifted in time produces a recently produced chip fraction output that contains chip fraction that have just been produced. The Final Office Action simply repeats the subject matter defined by Claim 7 and asserts that this subject matter is obvious. The Applicant, respectfully, asserts that this amounts to hindsight recreation. Accordingly, this rejection is traversed.

Regarding Claim 8, the Examiner states that Kenny et al. teach the recited subject matter for a transmission system wherein the receiving part of the station of the second type determines the frequency drifts. The Examiner states that Claim 8 broadly encompasses frequency drift. The Applicants respectfully point out that rejected Claim 8 specifically recites "the station of the second type further comprises an analysis circuit receives chip fractions shifted in time by the synchronization circuit and determines a frequency drift". The Final Office Action has not indicated any portion of Kenny et al. that shows a synchronization circuit that provides chip fractions shifted in time. The Applicants would like draw the Examiner's attention to the fact that the Examiner here asserts that Kenny et al. teach a synchronization circuit that provides chip fractions shifted in time. The Applicant, respectfully, requests that the Examiner clarify the stance taken in the Final Office Action, which vacillates between the position that Kenny et al. teach a synchronization circuit that provides chip fractions shifted in time and the position that Kenny et al. do not teach a synchronization circuit that provides chip fractions shifted in time. The Applicants request that the Examiner point out where within Kenny et al. as well as the other cited references that there is any disclosure or suggestion of a synchronization circuit that provides chip fractions shifted in time. The Applicants' position is that there is no disclosure or suggestion within the cited references of a synchronization circuit that provides chip fractions shifted in time. The Applicants assert that the rejections contained in the final Office Action

simply make statements that the various elements of the rejected claims are obvious without substantiating these rejections. Without such a substantiation, a *prima facie* of obviousness is not made. Therefore, this rejection is respectfully traversed.

Regarding Claim 9, the Examiner takes Official Notice of the adjusting frequency shift as shown in U.S. Patent No. 4,601,047. The Applicants, respectfully, point out that the subject matter recited by the rejected claims is sophisticated subject matter. The Applicants assert that that rejected Claim 9 defines subject matter for the receiving part of the station of the second type including means for modifying clock frequencies in response to the frequency drift.

The Applicants respectfully point out that the subject matter defined by rejected Claim 9 includes more than frequency shifting. Claim 9 includes the limitations of Claims 1, 5, 6, 7 and 8. Moreover, the Final Office Action does not demonstrate that the cited prior art references disclose, or suggest, a receiving part of the station of the second type further including means for modifying clock frequencies in response to the frequency drift. The Applicants further assert that the foregoing subject matter is not notoriously well known within the art and requests that the Examiner produce a prior art reference that illustrates means for modifying clock frequencies in response to the frequency drift as recited by rejected Claim 9. Accordingly, this rejection is respectfully traversed.

Regarding Claim 18, the Examiner states that Kenny et al. teach the recited subject matter for a method wherein the receiving part of the station of the second type further comprises an analysis circuit receives chip fractions shifted in time by the synchronization circuit and determines a frequency drift. The Examiner states that Claim 18 broadly encompasses frequency drift. The Applicants, respectfully, disagree. Claim 18 recites that a frequency drift is determined by an analysis circuit that receives chip fractions shifted in time by the synchronization circuit. Kenny et al. nor any of the cited references teach a synchronization circuit that produces chip fractions shifted in time. Therefore, this rejection is, respectfully traversed.

Regarding Claim 19, the Examiner takes Official Notice of adjusting frequency shift as shown in U.S. Patent No. 4,601,047. The Applicants, respectfully, point out that the subject matter recited by the rejected claims is sophisticated subject matter. The Applicants assert that that rejected Claim 19 defines subject matter wherein the receiving part of the station of the second type further comprises means for modifying clock frequencies in response to the



frequency drift. The Applicants respectfully point out that the subject matter defined by rejected Claim 19 includes more than frequency shifting. The Final Office Action does not demonstrate that the cited prior art references disclose, or suggest, a receiving part of the station of the second type further including means for modifying clock frequencies in response to the frequency drift. The Applicants further assert that the foregoing subject matter (for a receiving part of the station of the second type further including means for modifying clock frequencies in response to the frequency drift) is not notoriously well known within the art. The Applicants request that the Examiner produce a prior art reference that disclose a receiving part of the station of the second type further including means for modifying clock frequencies in response to the frequency drift as recited by rejected Claim 19. The Applicants assert that the Examiner has taken a single phrase out of context while ignoring the recitation of Claim 19 as a whole. The portions of Kenny et al. that are cited by the Examiner describe Doppler effects and do not disclose or suggest means for modifying clock frequencies in response to the frequency drift. Therefore, all the recited elements are not found in this rejection and a *prima facie* case of obviousness is not made. Accordingly, this rejection is respectfully traversed.

Regarding Claim 15, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner states that the claim broadly recites a "satisfactory state of synchronization". The Applicants, respectfully, point out that rejected Claim 15 recites that chip fractions are shifted in time to produces a first output corresponding to a satisfactory state of synchronism. This recitation clearly identifies that chip fractions are shifted in time; which as previously discussed is not disclosed or suggested by any of the cited references. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 16, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner further states that Molev-Shtelman discloses that the synchronization circuit provides chip fractions shifted in time produces an already produced chip fraction output that contains chip fraction previously produced at the first output. The Applicants, respectfully, point out that simply disclosing a coarse and a fine synchronization is not equivalent to a

synchronization circuit that chip fractions shifted in time to produce an already produced chip fraction output that contains chip fraction previously produced at the first output. The Final Office Action provides no rational for the mortifications made to prior art reference, Molev-Shtelman. The Applicants point out that the Examiner in making this rejection has greatly expanded and modified the teachings of Molev-Shtelman. The Examiner should indicate the motivation given within the cited reference that would lead a person skilled in the art to make this modification and this has not been done by the Final Office Action. The rejection contained within the Final Office Action simply makes the modification and states that it is obvious. Therefore, this rejection is, respectfully, traversed.

Regarding Claim 17, the Examiner states that Molev-Shtelman teaches a synchronization circuit that provides chip fractions shifted in time. As previously discussed, Molev-Shtelman does not disclose, or suggest, a synchronization circuit that provides chip fractions shifted in time. The Examiner further states that Molev-Shtelman discloses that the synchronization circuit provides chip fractions shifted in time produces a recently produced chip fraction output that contains chip fraction that have just been produced. The Applicants, respectfully, point out that simply disclosing a coarse and a fine synchronization is not equivalent to a synchronization circuit provides chip fractions shifted in time produces a recently produced chip fraction output that contains chip fraction that have just been produced. The Final Office Action provides no rational for the mortifications made to prior art reference, Molev-Shtelman. The Applicants point out that the Examiner in making this rejection has greatly expanded and modified the teachings of Molev-Shtelman. The Examiner should indicate the motivation given within the cited reference that would lead a person skilled in the art to make this modification and this has not been done by the Final Office Action. The rejection contained within the Final Office Action simply makes the modification and states that it is obvious. Therefore, this rejection is, respectfully, traversed.

The Final Office Actions rejects Claim 5 (the first Claim 5) under the provisions of 35 U.S.C. §112, second paragraph. The Examiner states that the metes and bounds of the claims cannot be assessed. Specifically, the Examiner states that it can not be determined what is meant by measuring the receive clock derivation made at the stations of the second type, comparing the transmit clock at the station of the second type by adopting the opposite deviation value, and single synchronization of the receive clock at the station of the first type. The Applicants

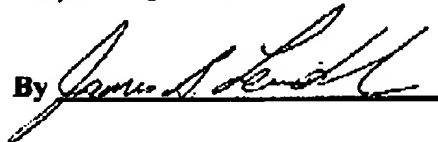
respectfully direct the Examiner's attention to the specification of the present invention beginning on page 3, line 12 through page 4, line 13, where the subject matter of this claim is clearly described. The Applicants believe that the metes and bounds of Claim 5 are very clear. The receive clock at the stations of the second type is measured and the receive clock derivation is made at the stations of the second type. The comparing the transmit clock at the station of the second type is accomplished by adopting the opposite deviation value as described on page 4 of the specification. Therefore, this rejection is respectfully, traversed.

The Final Office Actions rejects Claim 5 (the second Claim 5) under the provisions of 35 U.S.C. §112, second paragraph. The Examiner states that the metes and bounds of the claims cannot be assessed. Specifically, the Examiner states that it can not be determined what is meant by a chip fraction shifted to produce another chip fraction. Claim 5 (the second Claim 5) recites that the synchronization circuit provides chip fractions shifted in time produces a first output corresponding to a satisfactory state of synchronism. Therefore, the Applicants do not understand this rejection. The recitation is for "chip fractions shifted in time produces a first output corresponding to a satisfactory state of synchronism." The recitation is not for "a chip fraction shifted to produce another chip fraction" as stated by the Examiner. Accordingly, this rejection is in error and is, therefore, traversed.

Applicant is not aware of any additional patents, publications, or other information not previously submitted to the Patent and Trademark Office which would be required under 37 C.F.R. 1.99.

In view of the foregoing amendment and remarks, the Applicant believes that the present application is in condition for allowance, with such allowance being, respectfully, requested.

Respectfully submitted,

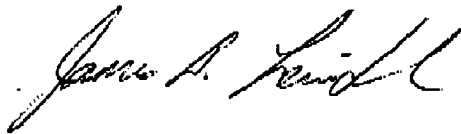
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